

CHAPTER 5

ENVIRONMENTAL CONSEQUENCES

The Environmental Consequences chapter summarizes the potential impacts on the social, cultural, physical and natural environment that would result from the proposed action. A baseline existing year, 2000, will be examined and compared to future year scenarios, 2007, with no action or reasonable alternatives for conducting the proposed action, as identified in the Alternatives Analysis. The future conditions under review are summarized as follow:

- No Action – assumed a continuation of the status quo conditions, with no change from existing facilities
- Improvements to existing Runway 12-30 to conform with current FAA Standards, the primary air carrier runway at the Gary/Chicago International Airport: relocate Elgin, Joliet, & Eastern (EJ&E) Railway (including land acquisition where appropriate); acquire land northwest of airport to allow for modifications to runway safety area (RSA); bury transmission power line; relocate/develop airside perimeter and southwest access roadways; extend Runway 12 to the northwest (approximately 546 feet by 150 feet) and displace Runway 30 threshold using declared distance standards approximately 546 feet to the northwest to improve Runway 30 RSA; relocate Runway 12-30 navigational aids (navaids); improve/grade RSA for Runway 12 (approximately 1,100 feet); relocate Runway 12 threshold to remove prior displacement; extend parallel Taxiway A to new end of Runway 12; and acquire land southeast of airport, located within or immediately adjacent to runway protection zone (RPZ). These airside improvements are needed to increase the margin of safety and to conform to FAA standards.
- Improvements to provide additional runway length on Runway 12-30 (proposed to occur simultaneously with and/or requiring accomplishment of the improvements to conform to FAA standards described above): acquire additional land or rights northwest of existing runway; extend Runway 12-30 to the northwest (up to approximately 1,354 feet by 150 feet); improve/grade extended Runway 12 safety area (approximately 1,100 feet); relocate Runway 12 threshold to end of extended runway pavement; relocate Runway 12 navaids; extend parallel Taxiway A to new end of Runway 12; construct deicing hold pads on Taxiway A at the ends of Runway 12 and Runway 30, and develop two high-speed exit taxiways. These airside improvements will increase the margin of safety for users of the Gary/Chicago International Airport and conform to FAA standards, while providing a facility that effectively and efficiently meets the demands of the existing users and forecast low-growth activity.
- Expansion of existing passenger terminal and apron to accommodate projected demands, based upon the low-case forecast, through the year 2020. The expansion of the terminal building will add one additional gate, bringing the total gates at the Gary/Chicago International Airport terminal to four.

- Analysis of sites adjacent to extended Runway 12-30 for aviation related development, including new passenger terminal and air cargo areas, in order to reserve these areas for potential long-term development. It is recognized that the purpose and need for the actual development of these more-extensive infrastructure has not been demonstrated at this time. Based upon the FAA's forecast review and given the long lead-time for major facility improvements, the Gary/Chicago International Airport has identified and reserved areas on their 2001 Airport Layout Plan to locate facilities to accommodate a mid or higher case activity growth in the areas of air cargo and scheduled air service. The site analysis for these areas will be included in the EIS in order to consider the environmental impacts before the Gary/Chicago International Airport decides to secure these areas for future aviation-related uses. The actual development of the site would be defined as the need arises and subject to a separate environmental review at that time.

Following the Federal Aviation Administration Order 5050.4, *Airport Environmental Handbook*, potential impacts of the No Action and proposed action alternatives are identified for 19 different impact categories. Each section in this chapter provides the background and regulatory definitions for the impact category, describes the analysis methodology, establishes the baseline conditions, reviews the future conditions, summarizes the findings or potential impacts, and provides a proposal for mitigation, if applicable. Consideration of cumulative impacts follows in Chapter 6, Cumulative Impacts. The 20 sections used in this chapter to describe the environmental consequences are:

- Noise
- Land Use
- Social Impacts (including Environmental Justice)
- Induced Socioeconomic Impacts
- Air Quality
- Water Quality
- Section 303c Lands [also known as Section 4(f) and Other Areas of Environmental Interest]
- Historic, Architectural, Archaeological, and Cultural Resources
- Biotic Communities
- Endangered and Threatened Species of Flora and Fauna
- Wetlands and Streams
- Floodplains
- Coastal Zone Management/Barrier Programs
- Wild and Scenic Rivers
- Farmland
- Energy Supply and Natural Resources
- Light Emissions
- Solid Waste Impacts
- Hazardous Waste Impacts
- Construction Impacts